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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Rudolf Singer

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EXAMINER

DEGHAN, QUEENIE S

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

09/10/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,632	Applicant(s) SINGER, RUDOLF	
	Examiner QUEENIE DEGHAN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 6-32 is/are pending in the application.
- 4a) Of the above claim(s) 6-13 and 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,14-21,23-26,31 and 32 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 31 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 31 recites the inner self supporting structure is selected from strut, thrust, annular ring, embossed or corrugated plate, or combinations thereof. The specifications offers support for combinations of strut, thrust and annular ring, but the combinations do not include embossed or corrugated plate. The specification also fails to offer support for struts, thrusts or rings consisting of embossed or corrugated plate. If the Examiner has erred in this, please point to the page and line number where support can be found.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 24 and 25 recites the limitation "said axis" in line 3, respectively. There is insufficient antecedent basis for this limitation in the claim.

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 14-17, 23-26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cozine (3,364,004). Regarding claims 1-2, 23 and 31, Cozine teaches a mandrel for producing glass tubes (col. 1 lines 29-32), the mandrel with rear and front ends that have a decreasing diameter and comprising a blowpipe, wherein the blowpipe comprises at least one self supporting tube, the self-supporting tube comprising an outer wall (i.e. 36) and inner self-supporting structure, such as three circumferentially placed thrusts (29) (figures 2 and 3, col. 3 lines 6-38). The tube is interpreted as a jacket since it sleeves the air pipe (24). Furthermore, Cozine teaches the blowpipe is made of metal such as Nichrome metal (col. 3 lines 63-64), which interpreted as all the parts of the blowpipe is made of the same metal. This would be obvious to one of ordinary skill in the art at the time of the invention since all the parts will be exposed to the same high temperature conditions of the molten glass and thus would require a similar metal material of similar strength.

7. Regarding claims 14 and 26, Cozine teaches a rear end biasing means, such as spring (50), adapted to assure a tight fit between a body (21) and the jacket, which is in the blowpipe (20) (figures 1 and 2, col. 5 lines 10-16).

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8. Regarding claim 15, the mandrel of Cozine is longitudinally symmetrical along its longitudinal axis since it comprises of concentric parts (figures 1-3).

9. Regarding claim 16, the mandrel is a Danner blowpipe (col. 1 lines 34-50).

10. Regarding claim 17, the mandrel provides an inner channel for blowing gas through and allows treating the inside surface of the glass tube with at least one gas (col. 3 lines 5-23).

11. Regarding claims 24 and 25, Cozine teaches a fixed bearing, such as cap 30, at the front end of the mandrel as well as a floating bearing at the rear end of the mandrel, both adapted to rotate the mandrel about its longitudinal axis (col. 2 line 70 to col. 3 line 5, col. 4 lines 46-58, col. 5 lines 23-30).

12. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cozine (3,364,004) in view of Frye (3,236,619). Cozine discloses other metal materials can be used for the mandrel, just as long as the metal has high creep strength at high temperatures and being oxidizing resistant (col. 3 lines 65-68). Frye teaches a mandrel for making glass tubes in the Danner process, wherein mandrel comprises of platinum metal 9col. 4 lines 26-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a platinum metal in the mandrel of Cozine because of its characteristic property of high strength.

Allowable Subject Matter

13. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 22 recites a coating on the metal jacket that is

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capable of being released upon contact with the inside surface of the glass tube. This limitation implies that the metal jacket is the outermost layer of the mandrel since it is this layer that the glass tube is in contact with. Although not specified, it is suggested that this is made clear. Furthermore, although such coatings are known in the art for mandrels used for the Danner process, the prior art fails to teach a mandrel for making glass tubes or rod comprising a metal jacket which the outermost layer of the mandrel, wherein the metal jacket has an outer wall and inner self-supporting strut/thrust and/or rings made of the same metal, and comprising the specified coating.

Response to Arguments

14. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. The applicant's arguments were directed toward the prior art of Dick, which is no longer a reference used in the current rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUEENIE DEHGHAN whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Daniels can be reached on 571-272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Queenie Dehghan/
Examiner, Art Unit 1791